

Work Order ID 85848 #

85848

Page 1

June-15-12 1:38:03 PM

Item ID: D2646

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Aft Cap

Start Date: 15/06/2012 Start Qty: 50.00

50

Cust Item ID:

Required Date: 29/06/2012 Req'd Qty: 50.00

50

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/06/15

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D2646

Rev C

100

0.00

100

PURCHASING

Purchasing

Memo

0.00

Purchasing

Issue P/O: 17235 1-Spin as per Dwg D2646 2-Material release note required

CL 12/06/18 50

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Memo

0.00

Packaging

Ensure Material Release Note is attached

12/29/20 50

120

QC6- Inspect dimensions to drawing

0.00

120

QC

Memo

0.00

Quality Control

8/7/14/30

Count
(x52)

QSPC/9

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Required Date: 29/06/2012 Req'd Qty: 50.00

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Customer:

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***
Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130		0.00							
-----	--	------	--	--	--	--	--	--	--

130

Small Fab

Small Fab

Memo

0.00

Small Fab

1-Drill using DT8026 as per Dwg D2646.2-Open holes to .297 as per Dwg D2646.3-Debur

50 ~~0~~ *FF* 12-08-14

140	QC5- Inspect part completeness to step on W/O	0.00							
-----	---	------	--	--	--	--	--	--	--

140

QC

Memo

0.00

Quality Control

Smb
12-8-14
DAS
16
2-03
12-8-14

50
counter

150	Chemical Conversion Coat per QSI005 4.1	0.00							
-----	---	------	--	--	--	--	--	--	--

150

HandFinish

Memo

0.00

Hand Finishing

50 *12-8-15*

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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Item Name: Aft Cap

Start Date: 15/06/2012 Start Qty: 50.00

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Cust Item ID:

Required Date: 29/06/2012 Req'd Qty: 50.00

50

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start ***NR1***
QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

160 White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum 0.00

160

Powdercoat

Powder Coating

Memo

START TIME:

FINISH TIME:

0.00

OVEN TEMPERATURE:

3200F

11:15

50 x ~~φ~~ *m/z* 12/08/13

170 QC3- Inspect Part Finish 0.00

170

QC

Quality Control

Memo

0.00

50 x ~~φ~~ *HL* 12/08/16

180 Small Fab 0.00

180

Small Fab

Small Fab

Memo

Install inserts as per Dwg D2646

0.00

50x ~~φ~~ *HL* 12/08/16

m121841

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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June-15-12 1:38:03 PM

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Page 4

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Required Date: 29/06/2012 Req'd Qty: 50.00

50

Customer:

Reference:

Approvals: Process Plan: Date:

Tooling: Date:

Run Start *NR1*

QC: Date:

SPC (Y/N): Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

190

QC5- Inspect part completeness to step on W/O

0.00



12/08/16



190

QC

Memo

0.00

Quality Control

200

Identify as per dwg & Stock Location: FP-2

0.00

200

Packaging

Memo

0.00

Packaging

150 of 12/08/16

210

QC21- Final Inspection - Work Order Release

0.00

210

QC

Memo

0.00

Quality Control

MLJ 12/08/16

MLJ 12/08/16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng/ Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

Picklist Print

June-15-12 1:38:07 PM

Page 1

Work Order ID: 85848

85848

Parent Item: D2646

D2646

Parent Item Name: Aft Cap

Start Date: 15/06/2012

Required Date: 29/06/2012

Start Qty: 50.00

Required Qty: 50.00

Comments:

IPP: G05.08.22Hole size revised in Step 5KJ/JLM

IPP Rev:H Changed Inserts 07-02-19 JLM

IPP rev I changed inserts 07.06.11 EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
ALS7-1032-130		Purchased	No			110	Each	2,108.000	2	100			

AI S7-1032-130

Insert

**

sl 12/08/16

Location

Loc Qty

Loc Code

ST280

51

117717

27

118966

22

119775

2

ST282

2057

119530

73

120181

12

121444

1972

D2646P

Purchased

No

180

Each

0.0000

1

50

D2646P

Aft Cap

**

12/4/28 (50)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

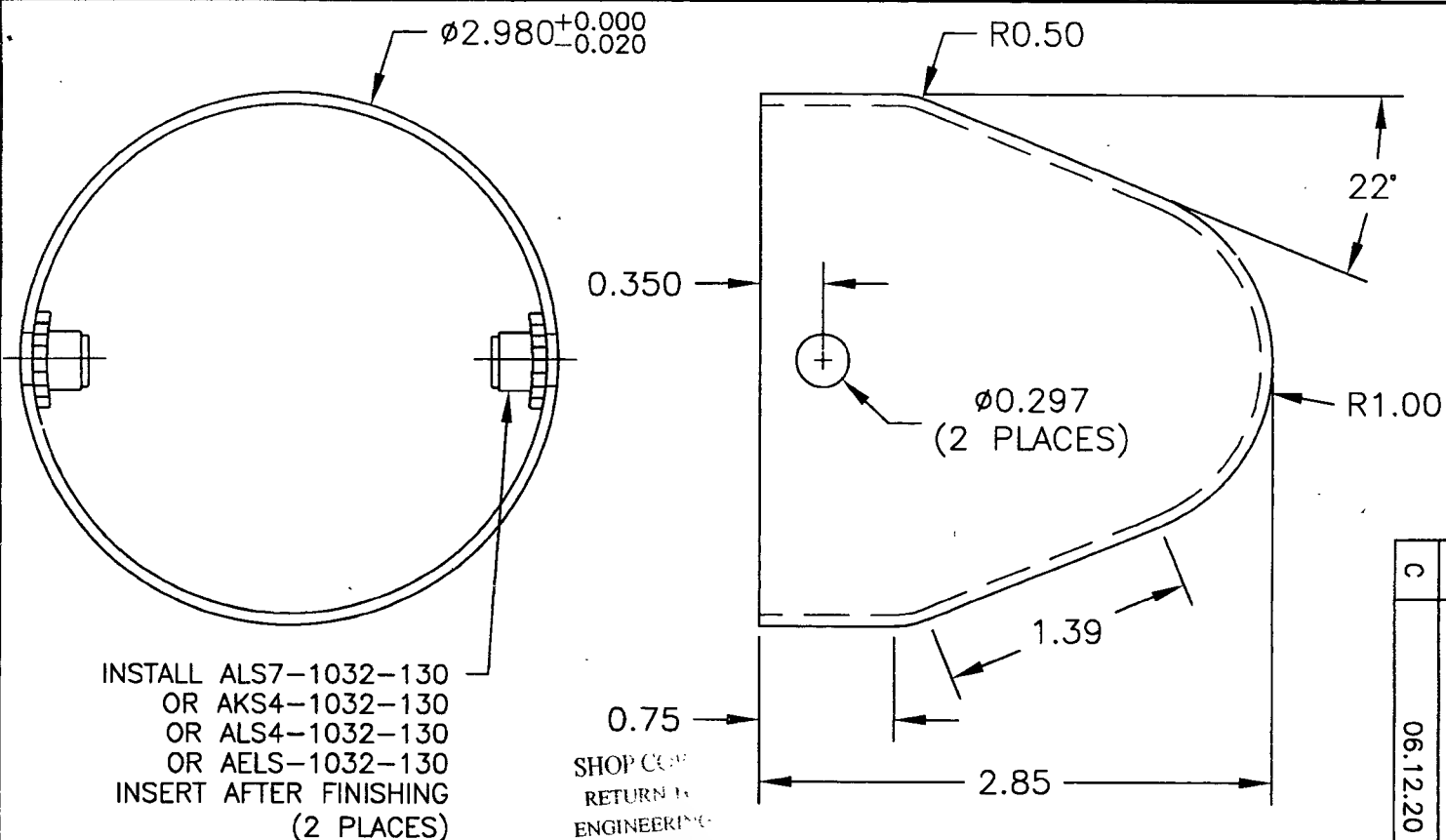
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

DART

DESIGN	DS	DRAWN BY	PH	DART AEROSPACE USA, INC.	PORT HADLOCK, WA	REV. C
CHECKED	<i>[Signature]</i>	APPROVED	<i>[Signature]</i>	DRAWING NO.	D2646	SHEET 1 OF 1
DATE	06.12.20	TITLE	AFT CAP	SCALE	1:1	
A		97.03.25	NEW ISSUE			
B		05.04.01	CHANGE TO CLOSED INSERTS			
C		06.12.20	CHANGE TO OPEN ENDED INSERTS			



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 25848 *MC* 12/06/15

D2646 AFT CAP

- 1) MATERIAL: ALUMINUM 1100-0 0.063 THICK (QQ-A-250/1)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

RELEASED
07.02.20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO17235

Purchase Order Date 6/18/12

PO Print Date 6/18/12

Page Number 1 of 1

Order From :

VC-SIE001

SIEG'S MANUFACTURING LTD.
6236 - 205 STREET
LANGLEY, BC V2Y 1N7
CA

Contact Name

Vendor Phone 604 530 7455

Vendor Fax 604 530 7490

Vendor Account Nbr

Buyer

Chantal Lavoie

Requisition Nbr

Tax Resale Nbr 10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Ship To :

DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

FAXED
6/18/12

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	D2646P	Aft Cap	6/29/12 Yes	50.00 Each	FedEx PI collect	\$6.7000	\$335.00

Special Inst: AS PER DWG D2646 REV. C
B85848

PO Total:

\$335.00

**CERTIFICATE OF CONFORMITY
REQ'D UPON DELIVERY**

**MATERIAL CERTIFICATION
REQ'D UPON DELIVERY**

No substitution or deviation without
consent.

Certificate of Conformity or Material
Certification required (YES) NO



Sieg's Manufacturing Ltd. Packing Slip

Metal Spinning & Metal Fabricating
6236 205 Street
Langley, BC, Canada V2Y 1N7
Phone:(604)530 7455 Fax:(604)530-7490
Check out our website: www.siegsmf.com

Packing Slip No.:
Date:
Page:

40941
06/27/2012
1

Sold to: DART AEROSPACE LTD. 1270 ABERDEEN STREET HAWKESBURY, ONTARIO K6A 1K7		Ship to: DART AEROSPACE LTD. 1270 ABERDEEN STREET HAWKESBURY, ONTARIO K6A 1K7	
Order No.: 17235		Sold By: KAULBARS, ARLA	
Shipped By:		Ship Date: 06/27/2012	
Tracking No.:			

Item No.	Unit	Description	Quantity
D2646P	Each	Aft CAP Aluminum	50
Comment:			



Sieg's Manufacturing Ltd.

6236 205 Street Langley, B.C. Canada V2Y 1N7

Ph#: (604)530-7455 fax#: (604)530-7490

arla@siegsmf.com

INSPECTION REPORT

Date: June 27, 2012

Customer: Dart Areospace

Packing Slip: 17235

Part#:	Quantity	Material	Check holes	Insp. By.
2646	50	1100-0 0.064"	N/a	AK

Notes:

Material Certification Attached: Yes

A company
ThyssenKrupp
Services

ThyssenKrupp Materials NA Inc.

ThyssenKrupp Materials NA
Copper and Brass Sales Division
95A Avenue 19044
V4N 4P2 Surrey
Tel.: 6048823493 Fax: 6048820686



Order number	Ord-pos	Del-pos	Part description
Customer PO	PO date	Quantity	Customer Part
MTR header	MTR type	Search criteria	Heat lot
=====			
C8A/1401020197	000010	900001	1100 Aluminum - O Aluminum Sheet 0.06300
1271	08.12.2011	80.000 ST	
Att_001.PDF	NCAP	930124417720110001	28149601A
=====			
C8A/1401020197	000010	900002	1100 Aluminum - O Aluminum Sheet 0.06300
1271	08.12.2011	8.000 ST	
Att_002.PDF	NCAP	930124192420110001	112843
=====			
C8A/1401020197	000010	900003	1100 Aluminum - O Aluminum Sheet 0.06300
1271	08.12.2011	12.000 ST	
Att_003.PDF	NCAP	930124417720110004	28149601A

Delivery number

2401597801

Date

12.12.2011

D Jewell

SIEGS MANUFACTURING LTD.
6236 205 ST
LANGLEY V2Y 1N7
CANADA

L-A-B
ACCREDITED
#L2068-1

ALERIS ROLLED PRODUCTS, LLC
C/O ALERIS ROLLED PRODUCTS, INC.
P O BOX 480
LEWISPORT, KENTUCKY 42351

ALUMINUM CERTIFICATION SHEET

THIS IS TO ADVISE THAT THE MATERIAL PRODUCED FOR YOUR ORDER
CONFORMS TO THE SPECIFICATIONS OUTLINED BY THE ALUMINUM ASSOCIATION.
MATERIAL WAS MELTED, ROLLED, AND PROCESSED IN THE USA.
THE TEST RESULTS RELATE ONLY TO THE SKID IDENTIFIED BELOW:

SKID : 427978 CUSTOMER: THYSSENKRUPP MATERIALS, NA
17901 ENGLEWOOD DRIVE
ORDER: 00337316-000001 CLEVELAND OH44130
LOT: 281496
SUBLOT : 28149601A PO # : 124138
PART # :
DESCRIPTION: ALLOY 1100
TEMPER O
SIZE .0630 X 48.0000
SPECS: ASTMB209 8.768/30

DATE TESTED: 09/13/2011

CHEMICAL COMPOSITION - ASTM E1251

SI	FE	CU	MN	MG	CR	ZN	TI	GA	V	AL
.11	.60	.13	.00	.00	.00	.01	.00	.00	.00	99.13

DATE TESTED: 10/02/2011

MECHANICAL PROPERTIES - ASTM B557

	RESULTS	T42 RESULTS	T62 RESULTS
ULTIMATE TENSILE STRENGTH MIN (KSI)	13.5		
ULTIMATE TENSILE STRENGTH MAX	13.6		
ULTIMATE TENSILE STRENGTH AVG	13.6		
YIELD STRENGTH MIN (KSI)	5.9		
YIELD STRENGTH MAX	6.4		
YIELD STRENGTH AVG	6.2		
ELONGATION MIN %	30		
ELONGATION MAX %	30		
ELONGATION AVG %	30		

NET SKID WEIGHT: 8,422

CHEMICALS CERTIFIED: /S/ SUSAN MUDD, QUALITY SYSTEMS SUPERINTENDENT
MECHANICALS CERTIFIED: /S/ SUSAN MUDD, QUALITY SYSTEMS SUPERINTENDENT

L-A-B
ACCREDITED
#L2068-1

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CLEVELAND OH44130
LOT : 281496
SUBLOT : 28149601A PO # : 124138
PART # :
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TEMPER O
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YIELD STRENGTH MAX	6.4		
YIELD STRENGTH AVG	6.2		
ELONGATION MIN %	30		
ELONGATION MAX %	30		
ELONGATION AVG %	30		

NET SKID WEIGHT: 8,441

CHEMICALS CERTIFIED: /S/ SUSAN MUDD, QUALITY SYSTEMS SUPERINTENDENT
MECHANICALS CERTIFIED: /S/ SUSAN MUDD, QUALITY SYSTEMS SUPERINTENDENT

L-A-B
ACCREDITED
#L2068-1

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YIELD STRENGTH AVG	6.2		
ELONGATION MIN %	30		
ELONGATION MAX %	30		
ELONGATION AVG %	30		

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MECHANICALS CERTIFIED: /S/ SUSAN MUDD, QUALITY SYSTEMS SUPERINTENDENT